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Grimpe, B.

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<130> CWRU-P01-018

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 <212> PRT
 <213> Rattus norvegicus

<400> 6

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Pro Leu Ser Arg Gln Lys Glu Arg Leu Gln Arg Lys Leu Gly Ala Gln
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Asp Lys Gly Gln Gly Gln Ser Val Leu Gly Lys Gly Pro Lys Glu Val
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Glu Thr Lys Ser Asp Gln Val Pro Lys Cys Asp Ile Ser Gly Lys Glu
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Ala Ile Ser Ala Leu Thr Arg Ala Lys Ser Lys His Cys Arg Gln Glu
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Ile Ala Glu Thr Tyr Cys Arg His Lys Leu Gly Leu Leu Met Pro Glu
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Lys Val Ala Arg Phe Cys Pro Leu Glu Gly Lys Ala Asn Lys Asn Val
165 170 175

Gln Trp Asp Glu Asp Ala Val Glu Tyr Met Pro Pro Asn Pro Val Arg
180 185 190

Ile Ala Phe Val Leu Val Val His Gly Arg Ala Ser Arg Gln Leu Gln
195 200 205

Arg Met Phe Lys Ala Ile Tyr His Lys Asp His Phe Tyr Tyr Ile His
210 215 220

Val Asp Lys Arg Ser Asn Tyr Leu His Arg Gln Val Leu Gln Phe Ser
225 230 235 240

Arg Gln Tyr Asp Asn Val Arg Val Thr Ser Trp Arg Met Ala Thr Ile
245 250 255

Trp Gly Gly Ala Ser Leu Leu Ser Thr Tyr Leu Gln Ser Met Arg Asp
260 265 270

Leu Leu Glu Met Thr Asp Trp Pro Trp Asp Phe Phe Ile Asn Leu Ser
275 280 285

Ala Ala Asp Tyr Pro Ile Arg Thr Asn Asp Gln Leu Val Ala Phe Leu
290 295 300

Ser Arg Tyr Arg Asp Met Asn Phe Leu Lys Ser His Gly Arg Asp Asn
305 310 315 320

Ala Arg Phe Ile Arg Lys Gln Asp Leu Asp Arg Leu Phe Leu Glu Cys
325 330 335

Asp Thr His Met Trp Arg Leu Gly Asp Arg Arg Ile Pro Glu Gly Ile
340 345 350

Ala Val Asp Gly Gly Ser Asp Trp Phe Leu Leu Asn Arg Lys Phe Val

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Leu Glu Asn Ser Pro His Cys Asp Thr Met Val Asp Asn Asn Leu Arg 405 410 415		
Ile Thr Asn Trp Asn Arg Lys Leu Gly Cys Lys Cys Gln Tyr Lys His 420 425 430		
Ile Val Asp Trp Cys Gly Cys Ser Pro Asn Asp Phe Lys Pro Gln Asp 435 440 445		
Phe His Arg Phe Gln Gln Thr Ala Arg Pro Thr Phe Phe Ala Arg Lys 450 455 460		
Phe Glu Ala Ile Val Asn Gln Glu Ile Ile Gly Gln Leu Asp Ser Tyr 465 470 475 480		
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Glu Asn Val Tyr Asp Glu Pro Asp Gly Ile Gln Ser Leu Ser Asp Val 500 505 510		
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Glu Ser Ser Leu His Thr Asp Gly Glu Asn Ser Cys Arg Tyr Tyr Pro 530 535 540		
Met Gly His Pro Ala Ser Val His Leu Tyr Phe Leu Ala Asp Arg Phe 545 550 555 560		
Gln Gly Phe Leu Ile Lys His His Val Thr Asn Leu Ala Val Ser Lys 565 570 575		
Leu Glu Thr Leu Glu Thr Trp Met Met Pro Lys Lys Val Phe Lys Val 580 585 590		

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Thr Asp Trp Asp Ala Lys Glu Arg Leu Phe Arg Asn Phe Gly Gly Leu
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Leu Gly Pro Met Asp Glu Pro Val Gly Met Gln Lys Trp Gly Lys Gly
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Pro Asn Val Thr Val Thr Val Ile Trp Val Asp Pro Val Asn Val Ile
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Ala Ala Thr Tyr Asp Ile Leu Ile Glu Ser Thr Ala Glu Phe Thr His
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Tyr Lys Pro Pro Leu Asn Leu Pro Leu Arg Pro Gly Val Trp Thr Val
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Lys Ile Leu His His Trp Val Pro Val Ala Glu Thr Lys Phe Leu Val
690 695 700

Ala Pro Leu Thr Phe Ser Asn Lys Gln Pro Ile Lys Pro Glu Glu Ala
705 710 715 720

Leu Lys Leu His Asn Gly Pro Pro Arg Ser Ala Tyr Met Glu Gln Ser
725 730 735

Phe Gln Ser Leu Asn Pro Val Leu Ser Leu His Ile Asn Pro Ala Gln
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Val Glu Gln Ala Arg Lys Asn Ala Ala Phe Thr Gly Thr Ala Leu Glu
755 760 765

Ala Trp Leu Val Gly Gly Thr Trp Thr Ala Met Asp Val Cys Ala Thr
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Gly Pro Thr Ala Cys Pro Val Met Gln Thr Cys Ser Gln Thr Ala Trp
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Asp Gly Arg Leu Arg
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<212> DNA
<213> Rattus norvegicus

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 <212> PRT
 <213> Rattus norvegicus

<400> 8

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Trp Ser Phe Ser Gly Leu Glu Glu Asp Glu Pro Gly Glu Lys Gly Arg
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Gln Arg Lys Pro Arg Pro Leu Asp Pro Gly Glu Gly Ser Lys Asp Thr
50 55 60

Asp Ser Ser Ala Gly Arg Arg Gly Ser Ala Gly Arg Arg His Gly Arg
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Trp Arg Gly Arg Ala Glu Ser Pro Gly Val Pro Val Ala Lys Val Val
85 90 95

Arg Ala Val Thr Ser Arg Gln Arg Ala Ser Arg Arg Val Pro Pro Ala
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Pro Pro Pro Glu Ala Pro Gly Arg Gln Asn Leu Ser Gly Ala Ala Ala
115 120 125

Gly Glu Ala Leu Ile Gly Ala Ala Gly Phe Pro Gln His Gly Asp Thr
130 135 140

Gly Ser Val Glu Gly Ala Pro Gln Pro Thr Asp Asn Ser Phe Thr Pro
145 150 155 160

Lys Cys Glu Ile Val Gly Lys Asp Ala Leu Ser Ala Leu Ala Arg Ala
165 170 175

Ser Thr Lys His Cys Gln Gln Glu Ile Ala Asn Val Val Cys Leu His
180 185 190

Gln Ala Gly Asn Leu Met Pro Lys Ser Val Pro Arg His Cys Gln Leu
195 200 205

Ala Gly Lys Val Ser Pro Gly Ile Gln Trp Glu Glu Val Arg Ala Gln
210 215 220

Gln Pro Val Ser Gly Pro Leu Val Arg Ile Ala Tyr Met Leu Val Val
225 230 235 240

His Gly Arg Ala Val Arg Gln Leu Lys Arg Leu Leu Lys Ala Val Tyr
245 250 255

His Glu Glu His Phe Phe Tyr Ile His Val Asp Lys Arg Ser Asn Tyr
260 265 270

Leu Tyr Arg Glu Val Val Glu Leu Ala Gln His Tyr Asp Asn Val Arg
275 280 285

Val Thr Pro Trp Arg Met Val Thr Ile Trp Gly Gly Ala Ser Leu Leu
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Arg Met Tyr Leu Arg Ser Met Lys Asp Leu Leu Glu Thr Pro Gly Trp
305 310 315 320

Thr Trp Asp Phe Phe Ile Asn Leu Ser Ala Thr Asp Tyr Pro Thr Arg
325 330 335

Thr Asn Glu Glu Leu Val Ala Phe Leu Ser Lys Asn Arg Asp Lys Asn
340 345 350

Phe Leu Lys Ser His Gly Arg Asp Asn Ser Arg Phe Ile Lys Lys Gln
355 360 365

Gly Leu Asp Arg Leu Phe His Glu Cys Asp Ser His Met Trp Arg Leu
370 375 380

Gly Glu Arg Gln Ile Pro Ala Gly Ile Val Val Asp Gly Gly Ser Asp
385 390 395 400

Trp Phe Val Leu Thr Arg Ser Phe Val Glu Tyr Val Val Tyr Thr Glu
405 410 415

Asp Pro Leu Val Ala Gln Leu Arg Gln Phe Tyr Thr Tyr Thr Leu Leu
420 425 430

Pro Ala Glu Ser Phe Phe His Thr Val Leu Glu Asn Ser Pro Ala Cys
435 440 445

Glu Ser Leu Val Asp Asn Asn Leu Arg Val Thr Asn Trp Asn Arg Lys
450 455 460

Leu Gly Cys Lys Cys Gln Tyr Lys His Ile Val Asp Trp Cys Gly Cys

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Leu	Tyr	Phe	Tyr	Asp	Asp	His	Phe	Gln	Gly	Tyr	Leu	Val	Thr	Gln	Ala
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Asp Ala Asp Thr Glu Val Thr Gln Tyr Lys Pro Pro Leu Ser Leu Pro
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Leu Arg Pro Gly Ala Trp Thr Val Arg Leu Leu Gln Phe Trp Glu Pro
725 730 735

Leu Gly Glu Thr Arg Phe Leu Val Leu Pro Leu Thr Phe Asn His Lys
740 745 750

Leu Pro Leu Arg Lys Asp Asp Ala Ser Trp Leu His Ala Gly Pro Pro
755 760 765

His Asn Glu Tyr Met Glu Gln Ser Phe Gln Gly Leu Ser Gly Ile Leu
770 775 780

Asn Leu Pro Gln Pro Glu Ala Val Glu Glu Ala Ala Arg Arg His Thr
785 790 795 800

Glu Leu Thr Gly Pro Ala Leu Glu Ala Trp Thr Asp Gly Glu Leu Ser
805 810 815

Ser Phe Trp Ser Val Ala Gly Leu Cys Ala Ile Gly Pro Ser Ser Cys
820 825 830

Pro Ser Leu Glu Leu Cys Arg Leu Thr Ser Trp Ser Ser Leu Ser Pro
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 <212> PRT
 <213> Mus musculus

<400> 10

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Asp Lys Arg Gln Gly Gln Ser Val Leu Gly Lys Gly Pro Lys Glu Val
 35 40 45

Leu Pro Pro Arg Glu Lys Ala Thr Gly Asn Ser Ser Gln Gly Lys Asp
 50 55 60

Leu Ser Arg His Ser His Ala Arg Lys Ser Gly Gly Gly Gly Ser Pro
 65 70 75 80

Glu Thr Lys Ser Asp Gln Ala Pro Lys Cys Asp Ile Ser Gly Lys Glu
 85 90 95

Ala Ile Ser Ala Leu Thr Arg Ala Lys Ser Lys His Cys Arg Gln Glu
 100 105 110

Ile Ala Glu Thr Tyr Cys Arg His Lys Leu Gly Leu Leu Met Pro Glu
 115 120 125

Lys Val Ala Arg Phe Cys Pro Leu Lys Gly Lys Ala His Lys Asn Val
 130 135 140

Gln Trp Asp Glu Asp Ala Val Glu Tyr Met Pro Ala Asn Pro Val Arg

145		150		155		160									
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			165						170					175	
Arg	Met	Ser	Lys	Ala	Ile	Tyr	His	Lys	Asp	His	Phe	Tyr	Tyr	Ile	His
			180					185					190		
Val	Asp	Lys	Arg	Ser	Asn	Tyr	Leu	His	Arg	Gln	Gly	Leu	Gln	Phe	Ser
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Trp	Gly	Gly	Ala	Ser	Phe	Leu	Ser	Thr	Tyr	Leu	Gln	Ser	Met	Arg	Asp
225					230					235					240
Leu	Leu	Glu	Met	Thr	Asp	Trp	Pro	Trp	Asp	Phe	Phe	Ile	Asn	Leu	Ser
			245						250					255	
Ala	Ala	Asp	Tyr	Pro	Ile	Arg	Thr	Asn	Asp	Gln	Leu	Val	Ala	Phe	Leu
		260						265					270		
Ser	Arg	Tyr	Arg	Asp	Met	Asn	Phe	Leu	Lys	Ser	His	Gly	Arg	Asp	Asn
		275					280					285			
Ala	Arg	Phe	Ile	Arg	Lys	Gln	Gly	Leu	Asp	Arg	Leu	Phe	Leu	Glu	Cys
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Asp	Thr	His	Met	Trp	Arg	Leu	Gly	Asp	Arg	Arg	Ile	Pro	Glu	Gly	Ile
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Ala	Val	Asp	Gly	Gly	Ser	Asp	Trp	Phe	Leu	Leu	Asn	Arg	Lys	Phe	Val
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Glu	Tyr	Val	Ala	Phe	Ser	Thr	Asp	Asp	Leu	Val	Thr	Lys	Met	Lys	Gln
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Ile Thr Asn Trp Asn Arg Lys Leu Gly Cys Lys Cys Gln Tyr Lys His
385 390 395 400

Ile Val Asp Trp Cys Gly Cys Ser Pro Asn Asp Phe Lys Pro Gln Asp
405 410 415

Phe His Arg Phe Gln Gln Thr Ala Arg Pro Thr Phe Phe Ala Arg Lys
420 425 430

Phe Glu Ala Ile Val Asn Gln Glu Ile Ile Gly Gln Leu Asp Ser Tyr
435 440 445

Leu Ser Gly Asn Phe Pro Ala Gly Thr Pro Gly Leu Arg Ser Tyr Trp
450 455 460

Glu Lys Leu Tyr Asp Gln Ser Ala Pro Leu Arg Ser Leu Ser Asp Val
465 470 475 480

Ala Leu Thr Met Tyr His Ser Phe Ile Arg Leu Gly Leu Arg Arg Ala
485 490 495

Glu Ser Ser Leu His Thr Asp Gly Glu Asn Ser Cys Arg Tyr Tyr Pro
500 505 510

Met Gly His Pro Val Ser Val His Phe Tyr Phe Leu Ala Asp Arg Phe
515 520 525

Gln Gly Phe Leu Ile Lys His His Val Thr Asn Leu Ala Val Ser Lys
530 535 540

Leu Glu Thr Leu Glu Thr Trp Met Met Pro Lys Glu Val Phe Lys Val
545 550 555 560

Ala Ser Pro Pro Ser Asp Phe Gly Arg Leu Gln Phe Ser Glu Val Gly
565 570 575

Thr Asp Trp Asp Ala Lys Glu Arg Leu Phe Arg Asn Phe Gly Gly Leu
580 585 590

Leu Gly Pro Met Asp Glu Pro Val Gly Met Gln Lys Trp Gly Lys Gly
595 600 605

Pro Asn Val Thr Val Thr Val Ile Trp Val Asp Pro Val Asn Val Ile
 610 615 620

Thr Ala Thr Tyr Asp Ile Leu Ile Glu Ser Thr Ala Glu Phe Thr His
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Tyr Lys Pro Pro Leu Asn Leu Pro Leu Arg Pro Gly Val Trp Thr Val
 645 650 655

Lys Ile Leu His His Trp Val Pro Val Ala Glu Thr Lys Phe Leu Val
 660 665 670

Ala Pro Leu Thr Phe Ser Asn Lys Gln Pro Ile Lys Pro Glu Glu Ala
 675 680 685

Leu Lys Leu His Asn Gly Pro Pro Arg Ser Ala Tyr Met Glu Gln Ser
 690 695 700

Phe Gln Ser Leu Asn Pro Val Leu Ser Leu His Ile Asn Pro Ala Gln
 705 710 715 720

Val Glu Gln Ala Arg Lys Asn Ala Ala Phe Thr Gly Thr Ala Leu Glu
 725 730 735

Ala Trp Leu Asp Ser Leu Val Gly Gly Thr Trp Thr Ala Met Asp Ile
 740 745 750

Cys Thr Thr Gly Pro Thr Ala Cys Pro Val Met Gln Thr Cys Ser Gln
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Thr Ala Trp Ser Ser Phe Ser Pro Asp Pro Lys Ser Glu Leu Gly Ala
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Val Lys Pro Asp Gly
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<210> 11

<211> 2974

<212> DNA

<213> Mus musculus

<400> 11

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<210> 12

<211> 668

<212> PRT

<213> Mus musculus

<400> 12

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Pro	Pro	Val	Arg	Ile	Ala	Tyr	Met	Leu	Val	Val	His	Gly	Arg	Ala	Ile
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Arg Gln Leu Lys Arg Leu Leu Lys Ala Val Tyr His Glu Gln His Phe
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Phe Tyr Ile His Val Asp Lys Arg Ser Asn Tyr Leu Tyr Arg Glu Val
65 70 75 80

Val Glu Leu Ala Gln His Tyr Glu Asn Val Arg Val Thr Pro Trp Arg
85 90 95

Met Val Thr Ile Trp Gly Gly Ala Ser Leu Leu Arg Met Tyr Leu Arg
100 105 110

Ser Met Lys Asp Leu Leu Glu Ile Pro Gly Trp Thr Trp Asp Phe Phe
115 120 125

Ile Asn Leu Ser Ala Thr Asp Tyr Pro Thr Arg Thr Asn Glu Glu Leu
130 135 140

Val Ala Phe Leu Ser Lys Asn Arg Asp Lys Asn Phe Leu Lys Ser His
145 150 155 160

Gly Arg Asp Asn Ser Arg Phe Ile Lys Lys Gln Gly Leu Asp Arg Leu
165 170 175

Phe His Glu Cys Asp Ser His Met Trp Arg Leu Gly Glu Arg Gln Ile
180 185 190

Pro Ala Gly Ile Val Val Asp Gly Gly Ser Asp Trp Phe Val Leu Thr
195 200 205

Arg Ser Phe Val Glu Tyr Val Val Tyr Thr Asp Asp Pro Leu Val Ala
210 215 220

Gln Leu Arg Gln Phe Tyr Thr Tyr Thr Leu Leu Pro Ala Glu Ser Phe
225 230 235 240

Phe His Thr Val Leu Glu Asn Ser Pro Ala Cys Ala Ser Leu Val Asp
245 250 255

Asn Asn Leu Arg Val Thr Asn Trp Asn Arg Lys Leu Gly Cys Lys Cys
260 265 270

Gln Tyr Lys His Ile Val Asp Trp Cys Gly Cys Ser Pro Asn Asp Phe
275 280 285

Lys Pro Gln Asp Phe Leu Arg Leu Gln Gln Val Ser Arg Pro Thr Phe
290 295 300

Phe Ala Arg Lys Phe Glu Ser Thr Val Asn Gln Glu Val Leu Glu Ile
305 310 315 320

Leu Asp Phe His Leu Tyr Gly Ser Tyr Pro Pro Ser Thr Pro Ala Leu
325 330 335

Lys Ala Tyr Trp Glu Asn Ile Tyr Asp Val Ala Asp Gly Pro Gly Gly
340 345 350

Leu Ser Asp Val Leu Leu Thr Ala Tyr Thr Ala Phe Ala Arg Leu Ser
355 360 365

Leu Arg His Ala Ala Thr Ala Val Ser Pro Leu Ala Thr Ala Val Cys
370 375 380

Arg Phe Glu Pro Arg Gly Leu Pro Ser Ser Val His Leu Tyr Phe Tyr
385 390 395 400

Asp Asp His Phe Gln Gly Tyr Leu Val Thr Gln Ala Val Gln Pro Ser
405 410 415

Ala Gln Gly Pro Ala Glu Thr Leu Glu Met Trp Leu Met Pro Gln Arg
420 425 430

Ser Leu Lys Leu Leu Gly His Ser Asp Gln Ala Ser Arg Leu Gln Ser
435 440 445

Leu Glu Val Gly Thr Glu Trp Asp Pro Lys Glu Arg Leu Phe Arg Asn
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Phe Gly Gly Leu Leu Gly Pro Leu Asp Glu Pro Val Ala Met Gln Arg
465 470 475 480

Trp Ala Arg Gly Pro Asn Leu Thr Ala Thr Val Val Trp Ile Asp Pro
485 490 495

Thr Tyr Val Val Ala Thr Ser Tyr Asp Ile Thr Val Asp Ala Asp Thr
500 505 510

Glu Val Thr Gln Tyr Lys Pro Pro Leu Ser Leu Pro Leu Arg Pro Gly
515 520 525

Ala Trp Thr Val Arg Leu Leu Gln Phe Trp Glu Pro Leu Gly Glu Thr
530 535 540

Arg Phe Leu Val Leu Pro Leu Thr Phe Asn Arg Lys Leu Pro Leu Arg
545 550 555 560

Lys Asp Asp Ala Ser Trp Leu His Ala Gly Pro Pro His Asn Glu Tyr
565 570 575

Met Glu Gln Ser Phe Gln Gly Leu Ser Gly Ile Leu Asn Leu Pro Gln
580 585 590

Ala Glu Ala Leu Glu Glu Ala Ala Arg Arg His Thr Glu Leu Thr Gly
595 600 605

Ser Ala Leu Glu Ala Trp Thr Asp Gly Glu Leu Ser Asn Phe Trp Ser
610 615 620

Val Ala Gly Leu Cys Ala Ile Gly Pro Ser Ala Cys Pro Ser Leu Glu
625 630 635 640

Leu Cys Arg Leu Thr Ser Trp Ser Ser Leu Ser Pro Asp Pro Lys Ser
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Glu Leu Gly Pro Val Lys Ala Asp Gly Arg Leu Arg
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<210> 13

<211> 1746

<212> DNA

<213> Homo sapiens

<400> 13

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<210> 14
 <211> 532
 <212> PRT
 <213> Homo sapiens

<400> 14

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Ala Cys Thr Pro Lys Gly Asp Glu Glu Gln Leu Ala Leu Pro Arg Ala
35 40 45

Asn Ser Pro Thr Gly Lys Glu Gly Tyr Gln Ala Val Leu Gln Glu Trp
50 55 60

Glu Glu Gln His Arg Asn Tyr Val Ser Ser Leu Lys Arg Gln Ile Ala
65 70 75 80

Gln Leu Lys Glu Glu Leu Gln Glu Arg Ser Glu Gln Leu Arg Asn Gly
85 90 95

Gln Tyr Gln Ala Ser Asp Ala Ala Gly Leu Gly Leu Asp Arg Ser Pro
100 105 110

Pro Glu Lys Thr Gln Ala Asp Leu Leu Ala Phe Leu His Ser Gln Val
115 120 125

Asp Lys Ala Glu Val Asn Ala Gly Val Lys Leu Ala Thr Glu Tyr Ala
130 135 140

Ala Val Pro Phe Asp Ser Phe Thr Leu Gln Lys Val Tyr Gln Leu Glu
145 150 155 160

Thr Gly Leu Thr Arg His Pro Glu Glu Lys Pro Val Arg Lys Asp Lys
165 170 175

Arg Asp Glu Leu Val Glu Ala Ile Glu Ser Ala Leu Glu Thr Leu Asn
180 185 190

Asn Pro Ala Glu Asn Ser Pro Asn His Arg Pro Tyr Thr Ala Ser Asp
195 200 205

Phe Ile Glu Gly Ile Tyr Arg Thr Glu Arg Asp Lys Gly Thr Leu Tyr

210		215		220
Glu Leu Thr Phe Lys Gly Asp His Lys His Glu Phe Lys Arg Leu Ile				
225		230		235 240
Leu Phe Arg Pro Phe Ser Pro Ile Met Lys Val Lys Asn Glu Lys Leu				
	245		250	255
Asn Met Ala Asn Thr Leu Ile Asn Val Ile Val Pro Leu Ala Lys Arg				
	260		265	270
Val Asp Lys Phe Arg Gln Phe Met Gln Asn Phe Arg Glu Met Cys Ile				
	275		280	285
Glu Gln Asp Gly Arg Val His Leu Thr Val Val Tyr Phe Gly Lys Glu				
290		295		300
Glu Ile Asn Glu Val Lys Gly Ile Leu Glu Asn Thr Ser Lys Ala Ala				
305		310		315 320
Asn Phe Arg Asn Phe Thr Phe Ile Gln Leu Asn Gly Glu Phe Ser Arg				
	325		330	335
Gly Lys Gly Leu Asp Val Gly Ala Arg Phe Trp Lys Gly Ser Asn Val				
	340		345	350
Leu Leu Phe Phe Cys Asp Val Asp Ile Tyr Phe Thr Ser Glu Phe Leu				
	355		360	365
Asn Thr Cys Arg Leu Asn Thr Gln Pro Gly Lys Lys Val Phe Tyr Pro				
370		375		380
Val Leu Phe Ser Gln Tyr Asn Pro Gly Ile Ile Tyr Gly His His Asp				
385		390		395 400
Ala Val Pro Pro Leu Glu Gln Gln Leu Val Ile Lys Lys Glu Thr Gly				
	405		410	415
Phe Trp Arg Asp Phe Gly Phe Gly Met Thr Cys Gln Tyr Arg Ser Asp				
	420		425	430
Phe Ile Asn Ile Gly Gly Phe Asp Leu Asp Ile Lys Gly Trp Gly Gly				
435		440		445

Glu Asp Val His Leu Tyr Arg Lys Tyr Leu His Ser Asn Leu Ile Val
 450 455 460

Val Arg Thr Pro Val Arg Gly Leu Phe His Leu Trp His Glu Lys Arg
 465 470 475 480

Cys Met Asp Glu Leu Thr Pro Glu Gln Tyr Lys Met Cys Met Gln Ser
 485 490 495

Lys Ala Met Asn Glu Ala Ser His Gly Gln Leu Gly Met Leu Val Phe
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Arg His Glu Ile Glu Ala His Leu Arg Lys Gln Lys Gln Lys Thr Ser
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Ser Lys Lys Thr
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<210> 15
 <211> 1456
 <212> DNA
 <213> Homo sapiens

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Gly Glu Lys Asp Pro Pro Pro Pro Gly Thr Gln Gly Val Val Tyr Phe
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Ala Asp Asp Asp Asn Thr Tyr Ser Arg Glu Leu Phe Glu Glu Met Arg
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Trp Thr Arg Gly Val Ser Val Trp Pro Val Gly Leu Val Gly Gly Leu
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Arg Phe Glu Gly Pro Gln Val Gln Asp Gly Arg Val Val Gly Phe His
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Thr Ala Trp Glu Pro Ser Arg Pro Phe Pro Val Asp Met Ala Gly Phe
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Ser Thr Ala Pro Arg Gly His Leu Glu Ser Ser Leu Leu Ser His Leu
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Val Asp Pro Lys Asp Leu Glu Pro Arg Ala Ala Asn Cys Thr Arg Val
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<400> 18

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Ser Glu Arg Gly Leu His Met Gln Lys Leu Gly Ser Gly Ser Val Gln
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Pro Arg Pro Ser Ala Ala Arg Asp Ala Pro Arg Ile Lys Trp Thr Lys
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Val Arg Thr Ala Ser Gly Gln Arg Gln Asp Leu Pro Ile Leu Val Ala
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Lys Asp Asn Val Val Arg Val Ala Lys Ser Trp Gln Gly Arg Val Ser
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Leu Pro Ser Tyr Pro Arg Arg Arg Ala Asn Ala Thr Leu Leu Leu Gly
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Pro Leu Arg Ala Ser Asp Ser Gly Leu Tyr Arg Cys Gln Val Val Arg
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Gly Ile Glu Asp Glu Gln Asp Leu Val Pro Leu Glu Val Thr Gly Val
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Val Phe His Tyr Arg Ser Ala Arg Asp Arg Tyr Ala Leu Thr Phe Ala
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Glu Ala Gln Glu Ala Cys Arg Leu Ser Ser Ala Ile Ile Ala Ala Pro
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Arg His Leu Gln Ala Ala Phe Glu Asp Gly Phe Asp Asn Cys Asp Ala
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Gly Trp Leu Ser Asp Arg Thr Val Arg Tyr Pro Ile Thr Gln Ser Arg
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Pro Gly Cys Tyr Gly Asp Arg Ser Ser Leu Pro Gly Val Arg Ser Tyr
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Gly Arg Arg Asn Pro Gln Glu Leu Tyr Asp Val Tyr Cys Phe Ala Arg
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Glu Leu Gly Gly Glu Val Phe Tyr Val Gly Pro Ala Arg Arg Leu Thr
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Leu Ala Gly Ala Arg Ala Gln Cys Arg Arg Gln Gly Ala Ala Leu Ala
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Ser Val Gly Gln Leu His Leu Ala Trp His Glu Gly Leu Asp Gln Cys
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Asp Pro Gly Trp Leu Ala Asp Gly Ser Val Arg Tyr Pro Ile Gln Thr
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Pro Arg Arg Arg Cys Gly Gly Pro Ala Pro Gly Val Arg Thr Val Tyr
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Arg Phe Ala Asn Arg Thr Gly Phe Pro Ser Pro Ala Glu Arg Phe Asp
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Ala Tyr Cys Phe Arg Ala His His Pro Thr Ser Gln His Gly Asp Leu
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Glu Thr Pro Ser Ser Gly Asp Glu Gly Glu Ile Leu Ser Ala Glu Gly
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Pro Pro Val Arg Glu Leu Glu Pro Thr Leu Glu Glu Glu Glu Val Val
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Thr Pro Asp Phe Gln Glu Pro Leu Val Ser Ser Gly Glu Glu Glu Thr
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Pro Gly Asp Pro Met Leu Ala Ser Trp Pro Thr Gly Glu Val Trp Leu
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Ser Thr Val Ala Pro Ser Pro Ser Asp Met Gly Ala Gly Thr Ala Ala
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Ala Glu Thr Lys Val Tyr Ser Leu Pro Leu Ser Leu Thr Pro Thr Gly						
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Gln Gly Gly Glu Ala Met Pro Thr Thr Pro Glu Ser Pro Arg Ala Asp						
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Phe Arg Glu Thr Gly Glu Thr Ser Pro Ala Gln Val Asn Lys Ala Glu
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His Ser Ser Ser Ser Pro Trp Pro Ser Val Asn Arg Asn Val Ala Val
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Gly Phe Val Pro Thr Glu Thr Ala Thr Glu Pro Thr Gly Leu Arg Gly
740 745 750

Ile Pro Gly Ser Glu Ser Gly Val Phe Asp Thr Ala Glu Ser Pro Thr
755 760 765

Ser Gly Leu Gln Ala Thr Val Asp Glu Val Gln Asp Pro Trp Pro Ser
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Val Tyr Ser Lys Gly Leu Asp Ala Ser Ser Pro Ser Ala Pro Leu Gly
785 790 795 800

Ser Pro Gly Val Phe Leu Val Pro Lys Val Thr Pro Asn Leu Glu Pro
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Trp Val Ala Thr Asp Glu Gly Pro Thr Val Asn Pro Met Asp Ser Thr
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Val Thr Pro Ala Pro Ser Asp Ala Ser Gly Ile Trp Glu Pro Gly Ser
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Leu Asp Thr Ser Ile Val Thr Pro Leu Thr Thr Leu Glu Gln Gly Asp
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Lys Val Gly Val Pro Ala Met Ser Thr Leu Gly Ser Ser Ser Ser Gln
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Pro His Pro Glu Pro Glu Asp Gln Val Glu Thr Gln Gly Thr Ser Gly
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Ala Ser Val Pro Pro His Gln Ser Ser Pro Leu Gly Lys Pro Ala Val
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Pro Pro Gly Thr Pro Thr Ala Ala Ser Val Gly Glu Ser Ala Ser Val
930 935 940

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Pro Ala Leu Pro Gly Thr Pro Met Asn Ala Gly Ala Glu Glu Val His
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Ile Asp Leu Gln Leu Gln Phe Ser Thr Ser Gln Pro Glu Ala Leu Leu
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Leu Leu Ala Ala Gly Pro Ala Asp His Leu Leu Leu Gln Leu Tyr Ser
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Gly Arg Leu Gln Val Arg Leu Val Leu Gly Gln Glu Glu Leu Arg Leu
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Gln Thr Pro Ala Glu Thr Leu Leu Ser Asp Ser Ile Pro His Thr Val
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Val Leu Thr Val Val Glu Gly Trp Ala Thr Leu Ser Val Asp Gly Phe
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Arg Gly Thr Leu Asp Gly Gly Phe Pro Phe Arg Leu Ser Asp Gly
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Glu His Thr Ser Pro Gly His Phe Phe Arg Val Thr Ala Gln Lys
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Gln Val Leu Leu Ser Leu Lys Gly Ser Gln Thr Leu Thr Val Cys
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Ser Ser Ala Gly Thr Asp Pro Gln Leu Leu Leu Tyr Arg Val Val
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Arg Gly Pro Gln Leu Gly Arg Leu Phe His Ala Gln Gln Asp Ser

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1880 1885 1890

Phe Thr Gln Ala Asp Val Asp Ser Gly Arg Leu Ala Phe Val Ala
1895 1900 1905

Asn Gly Ser Ser Val Ala Gly Ile Phe Gln Leu Ser Met Ser Asp
1910 1915 1920

Gly Ala Ser Pro Pro Leu Pro Met Ser Leu Ala Val Asp Ile Leu
1925 1930 1935

Pro Ser Ala Ile Glu Val Gln Leu Arg Ala Pro Leu Glu Val Pro
1940 1945 1950

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1955 1960 1965

Val Ser Asp Arg Glu Glu Pro Glu Ala Ala Tyr Arg Leu Ile Gln
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Gly Pro Gln Tyr Gly His Leu Leu Val Gly Gly Arg Pro Thr Ser
1985 1990 1995

Ala Phe Ser Gln Phe Gln Ile Asp Gln Gly Glu Val Val Phe Ala
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Phe Thr Asn Phe Ser Ser Ser His Asp His Phe Arg Val Leu Ala
2015 2020 2025

Leu Ala Arg Gly Val Asn Ala Ser Ala Val Val Asn Val Thr Val
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Arg Ala Leu Leu His Val Trp Ala Gly Gly Pro Trp Pro Gln Gly
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Glu Lys Gly Leu His Met Leu Lys Ser Gly Ser Gly Pro Ile Gln Ala
35           40           45

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Ala Leu Ala Glu Leu Val Ala Leu Pro Cys Phe Phe Thr Leu Gln Pro
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Arg Gln Ser Pro Leu Gly Asp Ile Pro Arg Ile Lys Trp Thr Lys Val
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Gln Thr Ala Ser Gly Gln Arg Gln Asp Leu Pro Ile Leu Val Ala Lys
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Asp Asn Val Val Arg Val Ala Lys Gly Trp Gln Gly Arg Val Ser Leu
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Ile Glu Asp Glu Gln Asp Leu Val Thr Leu Glu Val Thr Gly Val Val
145 150 155 160

Phe His Tyr Arg Ala Ala Arg Asp Arg Tyr Ala Leu Thr Phe Ala Glu
165 170 175

Ala Gln Glu Ala Cys His Leu Ser Ser Ala Thr Ile Ala Ala Pro Arg
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His Leu Gln Ala Ala Phe Glu Asp Gly Phe Asp Asn Cys Asp Ala Gly
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Trp Leu Ser Asp Arg Thr Val Arg Tyr Pro Ile Thr Gln Ser Arg Pro
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Gly Cys Tyr Gly Asp Arg Ser Ser Leu Pro Gly Val Arg Ser Tyr Gly
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Arg Arg Asp Pro Gln Glu Leu Tyr Asp Val Tyr Cys Phe Ala Arg Glu
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Leu Gly Gly Glu Val Phe Tyr Val Gly Pro Ala Arg Arg Leu Thr Leu
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Val Gly Gln Leu His Leu Ala Trp His Glu Gly Leu Asp Gln Cys Asp
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Pro Gly Trp Leu Ala Asp Gly Ser Val Arg Tyr Pro Ile Gln Thr Pro
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Phe Ala Asn Arg Thr Gly Phe Pro Ala Pro Gly Ala Arg Phe Asp Ala
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Pro Ala Pro Glu Leu Lys Pro Arg Leu Gly Glu Gln Glu Val Ile Thr
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Ser Glu Gly Gln	Val Val Ala Gln	Glu Ser Leu Gly	Thr Leu Thr Ser			
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Thr Leu Ile Pro	Val Ser Leu Gly	Leu Asp Glu Ser	Asp Leu Lys Val			
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Gln Gly Tyr Ala	Gly Glu Asn Cys	Glu Ile Asp Ile	Asp Asp Cys Leu			
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<212> PRT
<213> Rattus norvegicus

<400> 26

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Phe Gly Glu Asn His Leu Glu Val Pro Val Pro Ser Ala Leu Thr Arg
35 40 45

Val Asp Leu Leu Leu Gln Phe Ser Thr Ser Gln Pro Glu Ala Leu Leu
50 55 60

Leu Leu Ala Ala Gly Gln Thr Asp His Leu Leu Leu Gln Leu Gln Ser
65 70 75 80

Gly His Leu Gln Val Arg Leu Ala Leu Gly Gln Asn Glu Leu Ser Leu
85 90 95

Gln Thr Pro Ala Asp Thr Val Leu Ser Asp Ser Thr Thr His Thr Val
100 105 110

Val Leu Thr Val Ser Asn Ser Trp Ala Val Leu Ser Val Asp Gly Val
115 120 125

Leu Asn Thr Ser Ala Pro Ile Pro Lys Ala Ser His Leu Lys Val Pro
130 135 140

Tyr Gly Leu Phe Val Gly Ser Ser Gly Ser Leu Asp Leu Pro Tyr Leu
145 150 155 160

Lys Gly Ile Ser Arg Pro Leu Arg Gly Cys Leu His Ser Ala Ile Leu
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Asn Gly Arg Asn Leu Leu Arg Pro Leu Thr Pro Asp Val His Glu Gly
180 185 190

Cys Ala Glu Glu Phe Ser Ala Gly Asp Glu Val Gly Leu Gly Phe Ser
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Gly Pro His Ser Leu Ala Ala Phe Pro Ala Trp Ser Thr Arg Glu Glu
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Gly Thr Leu Glu Phe Thr Leu Thr Thr Arg Ser Gln Gln Ala Pro Leu
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Ala Phe Gln Ala Gly Asp Lys Arg Gly Asn Phe Ile Tyr Val Asp Ile
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Phe Glu Gly His Leu Arg Ala Val Val Glu Lys Gly Gln Gly Thr Met
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Leu Leu Arg Asn Ser Val Pro Val Ala Asp Gly Gln Pro His Glu Val
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Ser Val His Ile Asp Val His Arg Leu Glu Ile Ser Val Asp Gln Tyr
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Gly Ser Leu Leu Leu Gly Gly Leu Asp Thr Glu Ala Ser Arg His Leu
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Gln Glu His Arg Leu Gly Leu Thr Pro Gly Ala Ala Asn Ile Ser Leu
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Arg Asp Ala Trp Leu Thr Arg Asp Met Ala Ala Gly Cys Arg Pro Glu
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Glu Asp Glu Tyr Glu Glu Glu Val Tyr Gly Pro Phe Glu Ala Phe Ser
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Thr Leu Ala Pro Glu Ala Trp Pro Val Met Asp Leu Pro Glu Pro Cys
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Val Pro Glu Pro Gly Leu Pro Ala Val Phe Ala Asn Phe Thr Gln Leu
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Leu Thr Ile Ser Pro Leu Val Val Ala Glu Gly Gly Thr Ala Trp Leu
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Glu Trp Arg His Val Gln Pro Thr Leu Asp Leu Thr Glu Ala Glu Leu
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Arg Lys Ser Gln Val Leu Phe Ser Val Ser Gln Gly Ala Arg His Gly
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Glu Leu Glu Leu Asp Ile Pro Gly Ala Gln Thr Arg Lys Met Phe Thr
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Glu Asp Thr Ser Asp Gln Leu Met Leu Glu Val Ser Val Thr Ser Arg
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Ile Gln Val Asn Pro Val Asn Asp Pro Pro Arg Ile Val Phe Pro His
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Glu Ile Phe Gln Ala Tyr Asp Pro Asp Ser Ala Cys Glu Gly Leu Thr
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Gly Asn Ile Val Tyr Val His Arg Gly Gly Pro Ala Gln Asp Leu Thr
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Phe Arg Val Ser Asp Gly Met Gln Ala Ser Gly Pro Ala Thr Leu Lys
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Val Val Ala Val Arg Pro Ala Ile Gln Ile Leu His Asn Thr Gly Leu
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Arg Leu Ala Gln Gly Ser Ala Ala Ala Ile Leu Pro Ala Asn Leu Ser
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Val Glu Thr Asn Ala Val Gly Gln Asp Val Ser Val Leu Phe Arg Val
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Thr Gly Thr Leu Gln Phe Gly Glu Leu Gln Lys Gln Gly Ala Gly Gly
705 710 715 720

Val Glu Gly Thr Glu Trp Trp Asp Thr Leu Ala Phe His Gln Arg Asp
725 730 735

Val Glu Gln Gly Arg Val Arg Tyr Leu Ser Thr Asp Pro Gln His His
740 745 750

Thr Gln Asp Thr Val Glu Asp Leu Thr Leu Glu Val Gln Val Gly Gln
755 760 765

Glu Thr Leu Ser Asn Leu Ser Phe Pro Val Thr Ile Gln Arg Ala Thr
770 775 780

Val Trp Met Leu Gln Leu Glu Pro Leu His Thr Gln Asn Pro His Gln
785 790 795 800

Glu Thr Leu Thr Ser Ala His Leu Glu Ala Ser Leu Glu Glu Gly
805 810 815

Glu Gly Gly Pro Tyr Pro His Ile Phe His Tyr Glu Leu Val Gln Ala
820 825 830

Pro Arg Arg Gly Asn Leu Leu Leu Gln Gly Thr Arg Leu Ser Asp Gly
835 840 845

Gln Ser Phe Ser Gln Ser Asp Leu Gln Ala Gly Arg Val Thr Tyr Arg
850 855 860

Ala Thr Thr Arg Thr Ser Glu Ala Ala Glu Asp Ser Phe Arg Phe Arg
865 870 875 880

Val Thr Ser Pro Pro His Phe Ser Pro Leu Tyr Thr Phe Pro Ile His

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Val Pro Glu Gly Gly Glu Gly Val Leu Ser Ala Asp His Leu Phe Val 915 920 925																		
Lys Ser Leu Asn Ser Ala Ser Tyr Leu Tyr Glu Val Met Glu Gln Pro 930 935 940																		
His His Gly Ser Leu Ala Trp Arg Asp Pro Lys Gly Arg Ala Thr Pro 945 950 955 960																		
Val Thr Ser Phe Thr Asn Glu Asp Leu Leu His Gly Arg Leu Val Tyr 965 970 975																		
Gln His Asp Asp Ser Glu Thr Ile Glu Asp Asp Ile Pro Phe Val Ala 980 985 990																		
Thr Arg Gln Gly Glu Gly Ser Gly Asp Met Ala Trp Glu Glu Val Arg 995 1000 1005																		
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Arg Phe Thr Gln Glu Asp Leu Arg Lys Lys Gln Val Leu Phe Val 1085 1090 1095																		
His Ser Gly Ala Asp His Gly Trp Leu Gln Leu Gln Val Ser Asp 1100 1105 1110																		

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Asp Val Ala Ser Gly Leu Gly Asp Pro Leu Glu Gly Ile Ser Val
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Asp Arg Pro Gln Asp Gly Thr Leu Ser Thr Phe Ser Trp Arg Glu
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Val Glu Glu Gln Leu Ile Arg Tyr Val His Asp Gly Ser Glu Thr
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Leu Phe Ser His Arg Gly Ala Leu Glu Gly Gly Phe His Phe Asp
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Leu Ser Asp Gly Val His Thr Ser Pro Gly His Phe Phe Arg Val
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Val Ala Gln Lys Gln Val Leu Leu Ser Leu Glu Gly Ser Arg Lys
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Leu Thr Val Cys Pro Glu Ser Val Gln Pro Leu Ser Ser Gln Ser
1595 1600 1605

Leu Ser Ala Ser Ser Ser Thr Gly Ser Asp Pro Arg His Leu Leu
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Tyr Gln Val Val Arg Gly Pro Gln Leu Gly Arg Leu Leu His Ala
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Gln Gln Gly Ser Ala Glu Glu Ala Leu Val Asn Phe Thr Gln Ala
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Glu Pro Phe Trp Glu Ala His Asp Thr Ile Gly Leu Leu Leu Ser
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Ser Phe Asp Ala Ala Cys Pro Gln Arg Pro Ser Arg Leu Trp Arg
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Val Ala Ala Leu Asp Ala Ala Asn Leu Leu Ala Ser Val Pro Ala
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Ser Gln Arg Gly Arg His Asp Val Leu Phe Gln Ile Thr Gln Phe

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Arg Arg Pro His Phe Leu Gln Ser Glu Leu Thr Ala Gly Gln Leu				
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Val Tyr Ala His Gly Gly Gly Gly Thr Gln Gln Asp Gly Phe Arg				
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Phe Arg Ala His Leu Gln Gly Pro Thr Gly Ala Ser Val Ala Gly				
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Pro Gln Thr Ser Glu Ala Phe Val Ile Thr Val Arg Asp Val Asn				
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Glu Arg Pro Pro Gln Pro Gln Ala Ser Ile Pro Leu Arg Ile Thr				
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Arg Gly Ser Arg Ala Pro Val Ser Arg Ala Gln Leu Ser Val Val				
1850		1855		1860
Asp Pro Asp Ser Ala Pro Gly Glu Ile Glu Tyr Glu Val Gln Arg				
1865		1870		1875
Ala Pro His Asn Gly Phe Leu Ser Leu Ala Gly Asp Asn Thr Gly				
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Pro Val Thr His Phe Thr Gln Ala Asp Val Asp Ala Gly Arg Leu				
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Ala Phe Val Ala Asn Gly Ser Ser Val Ala Gly Val Phe Gln Leu				
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Ser Met Ser Asp Gly Ala Ser Pro Pro Ile Pro Met Ser Leu Ala				
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Val Asp Val Leu Pro Ser Thr Ile Glu Val Gln Leu Arg Ala Pro				
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Leu Glu Val Pro Gln Ala Leu Gly Arg Ser Ser Leu Ser Arg Gln				
1955		1960		1965

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Arg Leu Thr Gln Gly Pro Leu Tyr Gly Gln Val Leu Val Gly Gly
1985 1990 1995

Gln Pro Ala Ser Ala Phe Ser Gln Leu Gln Val Asp Gln Gly Asp
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Val Val Phe Ala Phe Thr Asn Phe Ser Ser Ser Gln Asp His Phe
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Lys Val Leu Ala Leu Ala Arg Gly Val Asn Ala Ser Ala Thr Val
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Asn Val Thr Val Gln Ala Leu Leu His Val Trp Ala Gly Gly Pro
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Trp Pro Gln Gly Thr Thr Leu Arg Leu Asp Pro Thr Val Leu Asp
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Ala Ser Glu Leu Ala Asn Arg Thr Gly Ser Met Pro Arg Phe Arg
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Leu Leu Glu Gly Pro Arg Tyr Gly Arg Val Val Arg Val Ser Gln
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Gly Arg Ala Glu Ser Arg Thr Asn Gln Leu Val Glu Asp Phe Thr
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Gln Gln Asp Leu Glu Glu Gly Arg Leu Gly Leu Glu Val Gly Arg
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Gly Lys Ser Thr Pro Thr Gly Gln Pro Gly Gln Ala Ala Ser Ser
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35 40 45

Val Asp Leu Leu Leu Gln Phe Ser Thr Ser Gln Pro Glu Ala Leu Leu
50 55 60

Leu Leu Ala Ala Gly Gln Asp Asp His Leu Leu Leu Gln Leu His Ser
65 70 75 80

Gly Cys Leu Gln Val Arg Leu Ala Leu Gly Gln Lys Glu Leu Lys Leu
85 90 95

Gln Thr Pro Ala Asp Thr Val Leu Ser Asp Ser Ala Pro His Thr Val
100 105 110

Val Leu Thr Val Ser Asp Ser Trp Ala Val Leu Ser Val Asp Gly Val
115 120 125

Leu Asn Thr Ser Ala Pro Ile Pro Arg Ala Ser His Leu Lys Ala Thr
130 135 140

Tyr Gly Leu Phe Val Gly Ser Ser Gly Ser Leu Asp Leu Pro Tyr Leu
145 150 155 160

Lys Gly Ile Ser Arg Pro Leu Arg Gly Cys Leu His Ser Ala Ile Leu
165 170 175

Asn Gly Arg Asn Leu Leu Arg Pro Leu Thr Ser Asp Val His Glu Gly
180 185 190

Cys Ala Glu Glu Phe Ser Ala Gly Asp Glu Val Gly Leu Gly Phe Ser
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Gly Pro His Ser Leu Ala Ala Phe Pro Ala Trp Ser Thr Arg Glu Glu
210 215 220

Gly Thr Leu Glu Phe Thr Leu Thr Thr Arg Ser Gln Gln Ala Pro Leu
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Ala Phe Gln Ala Gly Asp Lys Arg Gly Asn Phe Ile Tyr Val Asp Ile
245 250 255

Phe Glu Gly His Leu Arg Ala Val Val Glu Lys Gly Gln Gly Thr Met
260 265 270

Leu Leu Arg Asn Ser Val Pro Val Ala Asp Gly Gln Pro His Glu Val
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Ser Val His Ile Asp Val His Arg Leu Glu Ile Ser Val Asp Gln Tyr
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Pro Thr Arg Thr Phe Asn Arg Gly Val Leu Ser Tyr Leu Glu Pro Arg
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Gly Ser Leu Leu Leu Gly Gly Leu Asp Thr Glu Ala Ser Arg His Leu
325 330 335

Gln Glu His Arg Leu Gly Leu Ala Pro Gly Ala Ala Asn Ile Ser Leu
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Val Gly Cys Ile Glu Asp Phe Ser Val Asn Gly Arg Arg Gln Gly Leu
355 360 365

Arg Asp Ala Trp Leu Thr Arg Asp Met Ser Ala Gly Cys Arg Pro Glu
370 375 380

Glu Asp Glu Tyr Glu Glu Glu Val Tyr Gly Pro Tyr Glu Thr Phe Ser
385 390 395 400

Thr Leu Ala Pro Glu Ala Trp Pro Ala Met Glu Leu Pro Glu Pro Cys
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Ile Pro Glu Pro Gly Leu Pro Ala Val Phe Ala Asn Phe Thr Gln Leu
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Leu Thr Ile Ser Pro Leu Val Val Ala Glu Gly Gly Thr Ala Trp Leu
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Glu Trp Arg His Val Gln Pro Thr Leu Asp Leu Thr Glu Ala Glu Leu
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Arg Lys Ser Gln Val Leu Phe Ser Val Ser Gln Ser Ala Arg His Gly
465 470 475 480

Asp Leu Glu Leu Asp Ile Leu Gly Ala Gln Thr Arg Lys Met Phe Thr
485 490 495

Leu Leu Asp Val Val Asn Arg Lys Ala Arg Phe Val His Asp Gly Ser
500 505 510

Glu Asp Thr Ser Asp Gln Leu Met Leu Glu Val Ser Val Thr Ala Arg
515 520 525

Ala Pro Val Pro Ser Cys Leu Arg Arg Gly Gln Ile Tyr Ile Leu Pro
530 535 540

Ile Gln Val Asn Pro Val Asn Asp Pro Pro Arg Ile Ile Phe Pro His
545 550 555 560

Gly Ser Leu Met Val Ile Leu Glu His Thr Gln Lys Pro Leu Gly Pro
565 570 575

Glu Ile Phe Gln Ala Tyr Asp Pro Asp Ser Ala Cys Glu Gly Leu Thr
580 585 590

Phe Gln Leu Leu Gly Val Ser Ser Gly Val Pro Val Glu His Arg Asp
595 600 605

Gln Pro Gly Glu Pro Ala Thr Glu Phe Ser Cys Arg Glu Leu Glu Val
610 615 620

Gly Asp Ile Val Tyr Val His Arg Gly Gly Pro Ala Gln Asp Leu Thr
625 630 635 640

Phe Arg Val Ser Asp Gly Met Gln Ala Ser Ala Pro Ala Thr Leu Lys

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His Leu Ala Gln Gly Ser Ala Ala Ala Ile Leu Pro Ala Asn Leu Ser		
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Val Glu Thr Asn Ala Val Gly Gln Asp Val Ser Val Leu Phe Arg Val		
690	695	700
Thr Gly Thr Leu Gln Phe Gly Glu Leu Gln Lys Gln Gly Ala Gly Gly		
705	710	715
Val Glu Gly Thr Glu Trp Trp Asp Thr Leu Ala Phe His Gln Arg Asp		
725	730	735
Val Glu Gln Gly Arg Val Arg Tyr Leu Ser Thr Asp Pro Gln His His		
740	745	750
Thr Gln Asp Thr Val Glu Asp Leu Ile Leu Glu Val Gln Val Gly Gln		
755	760	765
Glu Thr Leu Ser Asn Leu Ser Phe Pro Val Thr Ile Gln Arg Ala Thr		
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Val Trp Met Leu Arg Leu Glu Pro Leu His Thr Gln Asn Pro His Gln		
785	790	795
Glu Thr Leu Thr Pro Ala His Leu Glu Ala Ser Leu Glu Glu Glu Glu		
805	810	815
Glu Glu Gly Ser Pro Gln Pro His Thr Phe His Tyr Glu Leu Val Gln		
820	825	830
Ala Pro Arg Arg Gly Asn Leu Leu Leu Gln Gly Thr Arg Leu Ser Asp		
835	840	845
Gly Glu Ser Phe Ser Gln Ser Asp Leu Gln Ala Gly Arg Val Thr Tyr		
850	855	860
Arg Ala Thr Met Arg Thr Ser Glu Ala Ala Asp Asp Ser Phe Arg Phe		
865	870	875
		880

Arg Val Thr Ser Pro Pro His Phe Ser Pro Leu Tyr Thr Phe Pro Ile
885 890 895

His Ile Gly Gly Asp Pro Asn Ala Pro Val Leu Thr Asn Val Leu Leu
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Met Val Pro Glu Gly Gly Glu Gly Val Leu Ser Ala Asp His Leu Phe
915 920 925

Val Lys Ser Leu Asn Ser Ala Ser Tyr Leu Tyr Glu Val Met Glu Gln
930 935 940

Pro His His Gly Lys Leu Ala Trp Arg Asp Pro Lys Gly Lys Ser Thr
945 950 955 960

Pro Val Thr Ser Phe Thr Asn Glu Asp Leu Leu His Gly Arg Leu Val
965 970 975

Tyr Gln His Asp Asp Ser Glu Thr Ile Glu Asp Asp Ile Pro Phe Val
980 985 990

Ala Thr Arg Gln Gly Glu Gly Ser Gly Asp Met Ala Trp Glu Glu Val
995 1000 1005

Arg Gly Val Phe Arg Val Ala Ile Gln Pro Val Asn Asp His Ala
1010 1015 1020

Pro Val Gln Thr Ile Ser Arg Val Phe His Val Ala Arg Gly Gly
1025 1030 1035

Gln Arg Leu Leu Thr Thr Asp Asp Val Ala Phe Ser Asp Ala Asp
1040 1045 1050

Ser Gly Phe Ser Val Ala Gln Leu Val Leu Thr Arg Lys Asp Leu
1055 1060 1065

Leu Phe Gly Ser Ile Val Ala Met Glu Glu Pro Thr Arg Pro Ile
1070 1075 1080

Tyr Arg Phe Thr Gln Glu Asp Leu Arg Lys Lys Gln Val Leu Phe
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1115						1120					1125			
Glu	Pro	Tyr	Leu	His	Val	Ala	Asn	Ser	Ser	Ser	Leu	Val	Val	Pro
1130						1135					1140			
Gln	Gly	Gly	Gln	Gly	Thr	Ile	Asp	Thr	Ala	Val	Leu	Gln	Leu	Asp
1145						1150					1155			
Thr	Asn	Leu	Asp	Ile	Arg	Ser	Gly	Asn	Glu	Val	His	Tyr	His	Val
1160						1165					1170			
Thr	Ala	Gly	Pro	Gln	Trp	Gly	Gln	Leu	Leu	Arg	Asp	Gly	Gln	Ser
1175						1180					1185			
Val	Thr	Ser	Phe	Ser	Gln	Arg	Asp	Leu	Leu	Asp	Gly	Ala	Ile	Leu
1190						1195					1200			
Tyr	Ser	His	Asn	Gly	Ser	Leu	Ser	Pro	Gln	Asp	Thr	Leu	Ala	Phe
1205						1210					1215			
Ser	Val	Ala	Ala	Gly	Pro	Val	His	Thr	Asn	Thr	Phe	Leu	Gln	Val
1220						1225					1230			
Thr	Ile	Ala	Leu	Glu	Gly	Pro	Leu	Ala	Pro	Leu	Gln	Leu	Val	Gln
1235						1240					1245			
His	Lys	Lys	Ile	Tyr	Val	Phe	Gln	Gly	Glu	Ala	Ala	Glu	Ile	Arg
1250						1255					1260			
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1265						1270					1275			
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Met	Val	Ser	His	Gly	Ala	Ser	Ala	Glu	Glu	Pro	Pro	Ser	Leu	Asp
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Leu Tyr Leu His Ser Arg Pro Gly Ala Trp Ser Asp Ser Phe Ser
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Leu Asp Val Ala Ser Gly Leu Gly Asp Pro Leu Glu Gly Ile Ser
1340 1345 1350

Val Glu Leu Glu Val Leu Pro Thr Val Ile Pro Leu Asp Val Gln
1355 1360 1365

Asn Phe Ser Val Pro Glu Gly Gly Thr Arg Thr Leu Ala Pro Pro
1370 1375 1380

Leu Val Gln Ile Thr Gly Pro Tyr Phe Pro Thr Leu Pro Gly Leu
1385 1390 1395

Val Leu Gln Val Leu Glu Pro Pro Gln His Gly Ala Leu Gln Lys
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Glu Asp His Ser Gln Asp Gly Ser Leu Ser Thr Phe Ser Arg Arg
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Glu Val Glu Glu Gln Leu Ile Arg Tyr Val His Asp Gly Ser Glu
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Thr Gln Thr Asp Ala Phe Val Leu Leu Ala Asn Ala Ser Glu Met
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Asp Arg Gln Ser Gln Pro Val Ala Phe Thr Ile Thr Ile Leu Pro
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Val Asn Asp Gln Pro Pro Val Leu Thr Thr Asn Thr Gly Leu Gln
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Ile Trp Glu Gly Ala Ile Val Pro Ile Pro Pro Glu Ala Leu Arg
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Gly Thr Asp Asn Asp Ser Gly Pro Glu Asp Leu Val Tyr Thr Ile
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Ala Ser Gln Arg Ser Arg His Asp Val Leu Phe Gln Val Thr Gln
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Phe Pro Thr Arg Gly Gln Leu Leu Val Ser Glu Glu Pro Leu His
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Ala Arg Arg Pro Tyr Phe Leu Gln Ser Glu Leu Ala Ala Gly Gln
1775 1780 1785

Leu Val Tyr Ala His Gly Gly Gly Gly Thr Gln Gln Asp Gly Phe
1790 1795 1800

Arg Phe Arg Ala His Leu Gln Gly Pro Thr Gly Thr Ser Val Ala
1805 1810 1815

Gly Pro Gln Thr Ser Glu Ala Phe Val Ile Thr Val Arg Asp Val
1820 1825 1830

Asn Glu Arg Pro Pro Gln Pro Gln Ala Ser Ile Pro Leu Arg Val
1835 1840 1845

Thr Arg Gly Ser Arg Ala Pro Val Ser Arg Ala Gln Leu Ser Val
1850 1855 1860

Val Asp Pro Asp Ser Ala Pro Gly Glu Ile Glu Tyr Glu Val Gln
1865 1870 1875

Arg Ala Pro His Asn Gly Phe Leu Ser Leu Ala Gly Asp Asn Thr
1880 1885 1890

Gly Pro Val Thr His Phe Thr Gln Ala Asp Val Asp Ala Gly Arg
1895 1900 1905

Leu Ala Phe Val Ala Asn Gly Ser Ser Val Ala Gly Val Phe Gln
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Leu Ser Met Ser Asp Glu Ala Ser Pro Pro Ile Pro Met Ser Leu
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Ala Val Asp Val Leu Pro Ser Thr Ile Glu Val Gln Leu Arg Ala
1940 1945 1950

Pro Leu Glu Val Pro Gln Ala Leu Gly Arg Thr Ser Leu Ser Arg
1955 1960 1965

Gln Gln Leu Gln Val Ile Ser Asp Arg Glu Glu Pro Asp Val Ala
1970 1975 1980

Tyr Arg Leu Thr Gln Gly Pro Leu Tyr Gly Gln Leu Leu Val Gly
1985 1990 1995

Gly Arg Pro Ala Ser Ala Phe Ser Gln Leu Gln Val Asp Gln Gly
2000 2005 2010

Asp Val Val Phe Val Phe Thr Asn Phe Ser Ser Ser Gln Asp His
2015 2020 2025

Phe Lys Val Val Ala Leu Ala Arg Gly Val Asn Ala Ser Ala Thr
2030 2035 2040

Val Asn Val Thr Val Gln Ala Leu Leu His Val Trp Ala Gly Gly
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Pro Trp Pro Gln Gly Thr Thr Leu Arg Leu Asp Pro Thr Val Leu
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Arg Leu Leu Ala Glu Pro Arg Tyr Gly Arg Val Val Arg Val Ser
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Ala Leu Leu Ser Val Pro Glu Ala Val Arg Thr Glu Thr Glu Lys
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Glu Pro Gly Gln Ala Ile Pro Leu Ile Thr Val Pro Gly Gln Gly
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<213> Rattus norvegicus

<400> 30

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Trp Gly Lys Lys Tyr Pro Ile Cys Asn Ser Pro Lys Gln Ser Pro Ile	50	55	60
Asn Ile Asp Glu Asp Leu Thr Gln Val Asn Val Asn Leu Lys Lys Leu	65	70	75
Lys Phe Gln Gly Trp Glu Lys Pro Ser Leu Glu Asn Thr Phe Ile His	85	90	95
Asn Thr Gly Lys Thr Val Glu Ile Asn Leu Thr Asn Asp Tyr Tyr Leu	100	105	110
Ser Gly Gly Leu Ser Glu Lys Val Phe Lys Ala Ser Lys Met Thr Phe	115	120	125
His Trp Gly Lys Cys Asn Val Ser Ser Glu Gly Ser Glu His Ser Leu	130	135	140
Glu Gly Gln Lys Phe Pro Leu Glu Met Gln Ile Tyr Cys Phe Asp Ala	145	150	155
Asp Arg Phe Ser Ser Phe Glu Glu Thr Val Lys Gly Lys Gly Arg Leu	165	170	175
Arg Ala Leu Ser Ile Leu Phe Glu Ile Gly Val Glu Glu Asn Leu Asp	180	185	190
Tyr Lys Ala Ile Ile Asp Gly Thr Glu Ser Val Ser Arg Phe Gly Lys	195	200	205
Gln Ala Ala Leu Asp Pro Phe Ile Leu Gln Asn Leu Leu Pro Asn Ser	210	215	220
Thr Asp Lys Tyr Tyr Ile Tyr Asn Gly Ser Leu Thr Ser Pro Pro Cys	225	230	235
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Gly Tyr Val Met Leu Met Asp Tyr Leu Gln Asn Asn Phe Arg Glu Gln
275 280 285

Gln Tyr Lys Phe Ser Arg Gln Val Phe Ser Ser Tyr Thr Gly Lys Glu
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Glu Ile His Glu Ala Val Cys Ser Ser Glu Pro Glu Asn Val Gln Ala
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Asp Pro Glu Asn Tyr Thr Ser Leu Leu Ile Thr Trp Glu Arg Pro Arg
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Val Val Tyr Asp Thr Met Ile Glu Lys Phe Ala Val Leu Tyr Gln Pro
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Leu Glu Gly Asn Asp Gln Thr Lys His Glu Phe Leu Thr Asp Gly Tyr
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Gln Asp Leu Gly Ala Ile Leu Asn Asn Leu Ile Pro Asn Met Ser Tyr
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Val Leu Gln Ile Val Ala Ile Cys Ser Asn Gly Leu Tyr Gly Lys Tyr
385 390 395 400

Ser Asp Gln Leu Ile Val Asp Met Pro Thr Glu Asp Ala Glu Leu Asp
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Leu Phe Pro Glu Leu Ile Gly Thr Glu Glu Ile Ile Lys Glu Glu Asn
420 425 430

Tyr Gly Lys Gly Asn Glu Glu Asp Thr Gly Leu Asn Pro Gly Arg Asp
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Ser Ala Thr Asn Gln Ile Arg Lys Lys Glu Pro Gln Val Ser Thr Thr
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Thr His Tyr Asn His Met Gly Thr Lys Tyr Asn Glu Ala Lys Thr Asn
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Glu Arg Glu Met Ser Leu Pro Ser Gln Ile Gly Thr Asn Leu Pro Pro
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His Ser Val Glu Gly Thr Ser Ala Ser Leu Asn Ser Gly Ser Lys Thr
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Leu Leu Val Phe Pro Gln Met Asn Leu Ser Gly Thr Ala Glu Ser Leu
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Asn Met Val Ser Ile Thr Glu Tyr Lys Glu Val Ser Ala Asp Leu Ser
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Glu Glu Glu Asn Leu Leu Thr Asp Phe Lys Leu Asp Ser Gly Ala Asp
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Asp Ser Ser Gly Ser Ser Pro Ala Ser Ser Thr Val Pro Phe Ser Thr
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Asp Asn Leu Ser His Gly Tyr Thr Ser Ser Ser Asp Thr Pro Glu Ala
610 615 620

Val Thr Tyr Asp Val Leu Arg Pro Glu Ser Thr Arg Asn Ala Leu Glu
625 630 635 640

Asp Ser Ala Pro Ser Gly Ser Glu Glu Ser Leu Lys Asp Pro Ser Leu
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Glu Gly Ser Val Trp Phe Pro Gly Ser Thr Asp Leu Thr Thr Gln Ser
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Glu Thr Gly Ser Gly Arg Glu Gly Phe Leu Gln Val Asn Ser Thr Asp
675 680 685

Phe Gln Val Asp Glu Ser Arg Glu Thr Thr Glu Thr Phe Ser Pro Asp
690 695 700

Ala Thr Ala Ser Arg Gly Pro Ser Val Thr Asp Met Glu Met Pro His
705 710 715 720

Tyr Ser Thr Phe Ala Tyr Pro Pro Thr Glu Val Thr Ser His Ala Phe
725 730 735

Thr Pro Ser Ser Arg Pro Leu Asp Leu Ala Pro Thr Ser Asn Ile Leu
740 745 750

His Ser Gln Thr Thr Gln Pro Val Tyr Asn Gly Glu Thr Pro Leu Gln
755 760 765

Pro Ser Tyr Ser Ser Glu Val Phe Pro Leu Val Thr Pro Leu Leu Leu
770 775 780

Asp Asn Gln Thr Leu Asn Thr Thr Pro Ala Ala Ser Ser Ser Asp Ser
785 790 795 800

Ala Leu His Ala Thr Pro Val Phe Pro Ser Val Gly Val Ser Phe Asp
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Ser Ile Leu Ser Ser Tyr Asp Asp Ala Pro Leu Leu Pro Phe Ser Ser
820 825 830

Ala Ser Phe Ser Ser Asp Leu Phe His His Leu His Thr Val Ser Gln
835 840 845

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His Ala Ser Leu Leu Val Ala Gly Gly Asp Leu Leu Leu Glu Pro Ser
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Leu Val Gln Tyr Ser Asp Val Met Ser His Gln Val Thr Ile His Ala
885 890 895

Ala Ser Asp Thr Leu Glu Phe Gly Ser Glu Ser Ala Val Leu Tyr Lys
900 905 910

Thr Ser Met Val Ser Gln Ile Glu Ser Pro Ser Ser Asp Val Val Met

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His Ala Tyr Ser Ser Gly	Pro Glu Thr Ser Tyr	Ala Ile Glu Gly Ser
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Ser Val Gly Val Ala Asp	Gln Gly Ser Leu Leu	Ile Asn Pro Ser His
	965	970 975
Ile Ser Leu Pro Glu Ser	Ser Phe Ile Thr Pro	Thr Ala Ser Leu Leu
	980	985 990
Gln Leu Pro Pro Ala Leu	Ser Gly Asp Gly Glu	Trp Ser Gly Ala Ser
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Pro Ile Thr Lys Val Phe	Asp Gln Glu Ile Ser	Arg Val Pro Glu
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Gln	Pro	Leu	Leu	Tyr	Glu	Ala	Ala	Ser	Pro	Phe	Asn	Thr	Glu	Ala
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Gln	Gly	Leu	Leu	Lys	Ser	Lys	Ser	Pro	Gln	Gln	Val	Leu	Pro	Ser
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Asp Lys Ala Leu Thr Gly Leu Pro Thr Thr Val Ser Asp Val Leu
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Ile Ala Thr Asp His Ser Val Pro Leu Gly Ser Gly Pro Ile Ser
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Met Thr Thr Val Ser Pro Asn Arg Asp Asp Ser Val Thr Thr Thr
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Lys Leu Leu Leu Pro Ser Lys Ala Thr Ser Lys Pro Thr His Ser
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Ala Arg Ser Asp Ala Asp Leu Val Gly Gly Gly Glu Asp Gly Asp
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Asp Tyr Asp Asp Asp Asp Tyr Asp Asp Ile Asp Ser Asp Arg Phe
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Pro Val Asn Lys Cys Met Ser Cys Ser Pro Tyr Arg Glu Ser Gln
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Glu Lys Val Met Asn Asp Ser Asp Thr Gln Glu Ser Ser Leu Val
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Asp Gln Ser Asp Pro Ile Ser His Leu Leu Ser Glu Asn Thr Glu
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Glu Glu Asn Gly Gly Thr Gly Val Thr Arg Val Asp Lys Ser Pro
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Glu Thr Ser Thr Asp Phe Ser Phe Pro Asp Val Asn Glu Lys Asp
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Val Glu Glu Ile Gly Trp Ser Tyr Thr Gly Ala Leu Asn Gln Lys Asn
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Trp Gly Lys Lys Tyr Pro Ile Cys Asn Ser Pro Lys Gln Ser Pro Ile
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Asn Ile Asp Glu Asp Leu Thr Gln Val Asn Val Asn Leu Lys Lys Leu
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Lys Phe Gln Gly Trp Glu Lys Ala Ser Leu Glu Asn Thr Phe Ile His
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275 280 285

Gln Tyr Lys Phe Ser Arg Gln Val Phe Ser Ser Tyr Thr Gly Lys Glu
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Asp Pro Glu Asn Tyr Thr Ser Leu Leu Val Thr Trp Glu Arg Pro Arg
325 330 335

Val Val Tyr Asp Ala Met Ile Glu Lys Phe Ala Val Leu Tyr Gln Pro
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Leu Ala Gly Asn Asp Gln Ala Lys His Glu Phe Leu Thr Asp Gly Tyr
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Gln Asp Leu Gly Ala Ile Leu Asn Asn Leu Leu Pro Asn Met Ser Tyr
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Val Leu Gln Ile Val Ala Val Cys Ser Asn Gly Leu Tyr Gly Lys Tyr
385 390 395 400

Ser Asp Gln Leu Ile Val Asp Met Pro Thr Glu Asp Ala Glu Leu Asp
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Leu Phe Pro Glu Leu Ile Gly Thr Glu Glu Ile Ile Lys Glu Glu Glu
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Tyr Gly Lys Asp Asn Glu Glu Asp Thr Gly Leu Asn Pro Gly Arg Asp
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Ser Val Thr Asn Gln Ile Arg Lys Lys Glu Pro Gln Val Ser Thr Thr
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Thr His Tyr Asn His Met Gly Thr Lys Tyr Asn Glu Ala Lys Thr Asn
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Arg Ser Pro Thr Arg Gly Ser Glu Phe Ser Gly Lys Ser Asp Val Pro
485 490 495

Asn Thr Ser Pro Asn Ser Thr Ser Gln His Val Ala Glu Phe Glu Thr
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Ala Thr Val Ser Gln Asp Pro Ser Val Thr Asp Met Gly Met Pro His 705 710 715 720		
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Thr Pro Ser Ser Arg Pro Leu Asp Leu Ala Pro Thr Ile Asn Ile Leu 740 745 750		
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Pro Ser Tyr Ser Ser Glu Val Phe Pro Leu Ala Thr Pro Leu Leu Leu 770 775 780		
Asp Asn Gln Thr Leu Asn Thr Thr Pro Ala Ala Ser Ser Ser Asp Ser 785 790 795 800		

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Ser Ile Leu Ser Ser Tyr Asp Asp Ala Pro Leu Leu Pro Phe Ser Ser
820 825 830

Ala Ser Phe Ser Ser Glu Met Phe Arg His Leu His Thr Val Ser Gln
835 840 845

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850 855 860

His Ala Ser Leu Leu Val Ala Arg Gly Asp Leu Leu Leu Glu Pro Ser
865 870 875 880

Leu Val Gln Tyr Ser Asp Val Ala Ser His Gln Ala Thr Thr Arg Ala
885 890 895

Ala Ser Asp Thr Leu Gly Phe Gly Ser Glu Ser Ala Val Phe Tyr Lys
900 905 910

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915 920 925

His Ala Tyr Ser Ser Gly Pro Glu Pro Ser Tyr Thr Val Glu Gly Ser
930 935 940

His His Val Pro Thr Val Ser Tyr Ser Ser Ala Met Pro Leu His Gly
945 950 955 960

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Asp Val Val His Lys Trp Ser Glu Ser Leu Lys Glu Thr Ser Val
1085 1090 1095

Ser Ile Ser Ser Met Lys Ser Val Phe Pro Glu Ser Leu Val Tyr
1100 1105 1110

Pro Thr Thr Lys Gly Phe Glu Gln Gly Val Ser His Val Pro Glu
1115 1120 1125

Ile Ile Phe Pro Val Gln Pro Thr His Thr Ala Ser Gln Ala Ser
1130 1135 1140

Gly Asp Thr Trp Leu Lys Pro Gly Leu Ser Ala Asn Ser Glu Ala
1145 1150 1155

Ala Phe Ser Asp Thr Ala Ser Arg Glu Val Val His Pro Ser Thr
1160 1165 1170

Gln Pro Leu Leu Tyr Glu Ala Ala Thr Pro Phe Asn Thr Glu Ala
1175 1180 1185

Leu Leu Gln Pro Ser Phe Gln Ala Ser Asp Val Asp Thr Leu Leu
1190 1195 1200

Lys Thr Ala Leu Pro Ser Val Pro Ser Asp Pro Ile Leu Ala Gly
1205 1210 1215

Thr Pro Gln Val Glu Gln Ser Ser Ser Ser Val Ser His Pro Met
1220 1225 1230

Ala	Ser	Glu	Ser	Gly	Ser	Ser	Glu	Ser	Met	Leu	His	Phe	Thr	Ser
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Val	Pro	Ile	Leu	Asp	Ile	Ser	Pro	Ser	Lys	Val	His	Ser	Thr	Pro
1250						1255					1260			
Leu	Gln	Gly	Leu	Thr	Val	Pro	His	Ser	Ser	Lys	Lys	Phe	Ser	Glu
1265						1270					1275			
Gln	Gly	Leu	Leu	Lys	Ser	Lys	Ser	Pro	Gln	Gln	Val	Leu	Pro	Ser
1280						1285					1290			
Leu	Phe	Ser	Asn	Asp	Glu	Phe	Phe	Gln	Asn	Ala	His	Leu	Asp	Val
1295						1300					1305			
Ser	Gln	Ala	Tyr	Pro	Pro	Lys	Gly	Arg	His	Ala	Phe	Val	Thr	Pro
1310						1315					1320			
Val	Leu	Ser	Ile	Asp	Glu	Pro	Gln	Asn	Thr	Leu	Ile	Asn	Lys	Leu
1325						1330					1335			
Val	Tyr	Ser	Glu	Asp	Ile	Phe	Ser	Ser	Thr	Glu	Ile	Ser	Ile	Thr
1340						1345					1350			
Asp	Lys	Val	Leu	Thr	Gly	Leu	Pro	Thr	Leu	Ala	Ser	Asp	Val	Leu
1355						1360					1365			
Ser	Ser	Thr	Asp	His	Ser	Val	Pro	Leu	Gly	Ser	Gly	Pro	Ile	Ser
1370						1375					1380			
Leu	Thr	Met	Val	Ser	Pro	Asn	Arg	Asp	Asp	Ser	Val	Thr	Thr	Ala
1385						1390					1395			
Lys	Leu	Leu	Leu	Pro	Ser	Thr	Ala	Thr	Ser	Lys	Leu	Thr	Gln	Ser
1400						1405					1410			
Ala	Arg	Ser	Asp	Ala	Asp	Leu	Val	Gly	Gly	Gly	Glu	Asp	Gly	Asp
1415						1420					1425			
Asp	Tyr	Asp	Asp	Asp	Asp	Tyr	Asp	Asp	Ile	Asp	Arg	Gly	Arg	Phe
1430						1435					1440			
Pro	Val	Asn	Lys	Cys	Met	Ser	Cys	Leu	Pro	Tyr	Arg	Glu	Ser	Arg

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Glu Lys Val Met Asn Asp Ser Asp Thr Gln Glu Ser Ser Leu Val				
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Asp Gln Ser Asp Pro Ile Ser Pro Leu Leu Phe Glu Asn Thr Glu				
1475		1480		1485
Glu Glu Asn Gly Gly Thr Gly Val Thr Arg Val Asp Lys Ser Pro				
1490		1495		1500
Pro Pro Ser Met Leu Pro Gln Asn His Asn Asp Gly Lys Glu Asp				
1505		1510		1515
Ser Asp Ile Gln Met Gly Ser Ala Val Leu Pro His Thr Pro Gly				
1520		1525		1530
Ser Lys Ala Trp Ala Val Leu Thr Ser Asp Glu Glu Ser Gly Ser				
1535		1540		1545
Gly Gln Gly Thr Ser Asp Ser Leu Asn Asp Asn Glu Thr Ser Thr				
1550		1555		1560
Asp Phe Ser Phe Pro Asp Val Asn Glu Lys Asp Thr Asp Gly Val				
1565		1570		1575
Leu Glu Thr Asp Asp Thr Gly Ile Ala Pro Gly Ser Pro Arg Ser				
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